

**ABSTRACT**

Apparatus, and an associated method, for encoding digital data to be communicated by a sending station, such as a base transceiver station of a cellular communication system. Space-time diversity is provided pursuant to the encoding, thereby to facilitate communication of data upon communication channels susceptible to fading conditions. A systematic and recursive space-time coder includes a coset selecting coder for forming coset addressing values used in connection to a multi-dimensional constellation. The coset addressing values are used by a signal entity selector to select a multi-dimensional constellation entity.